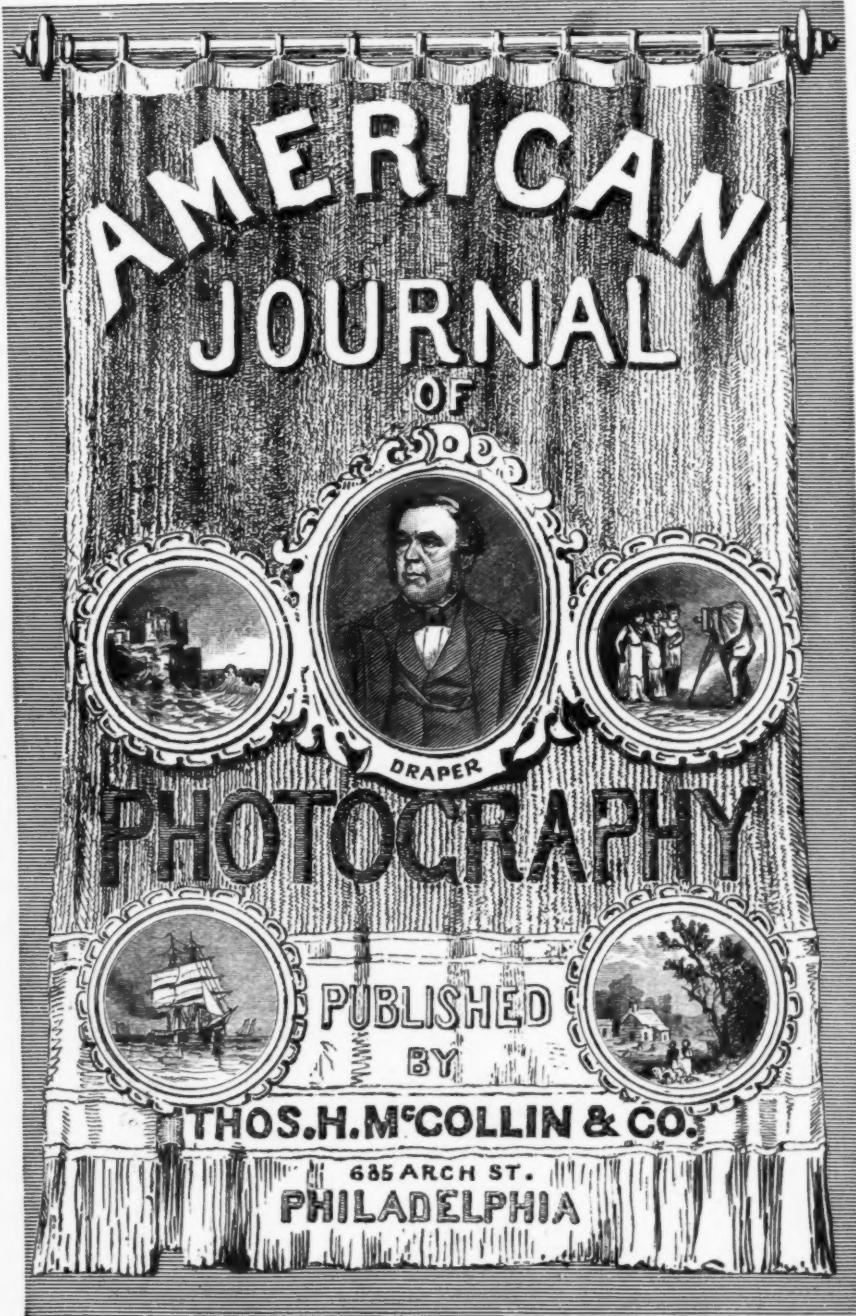


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No. 8.



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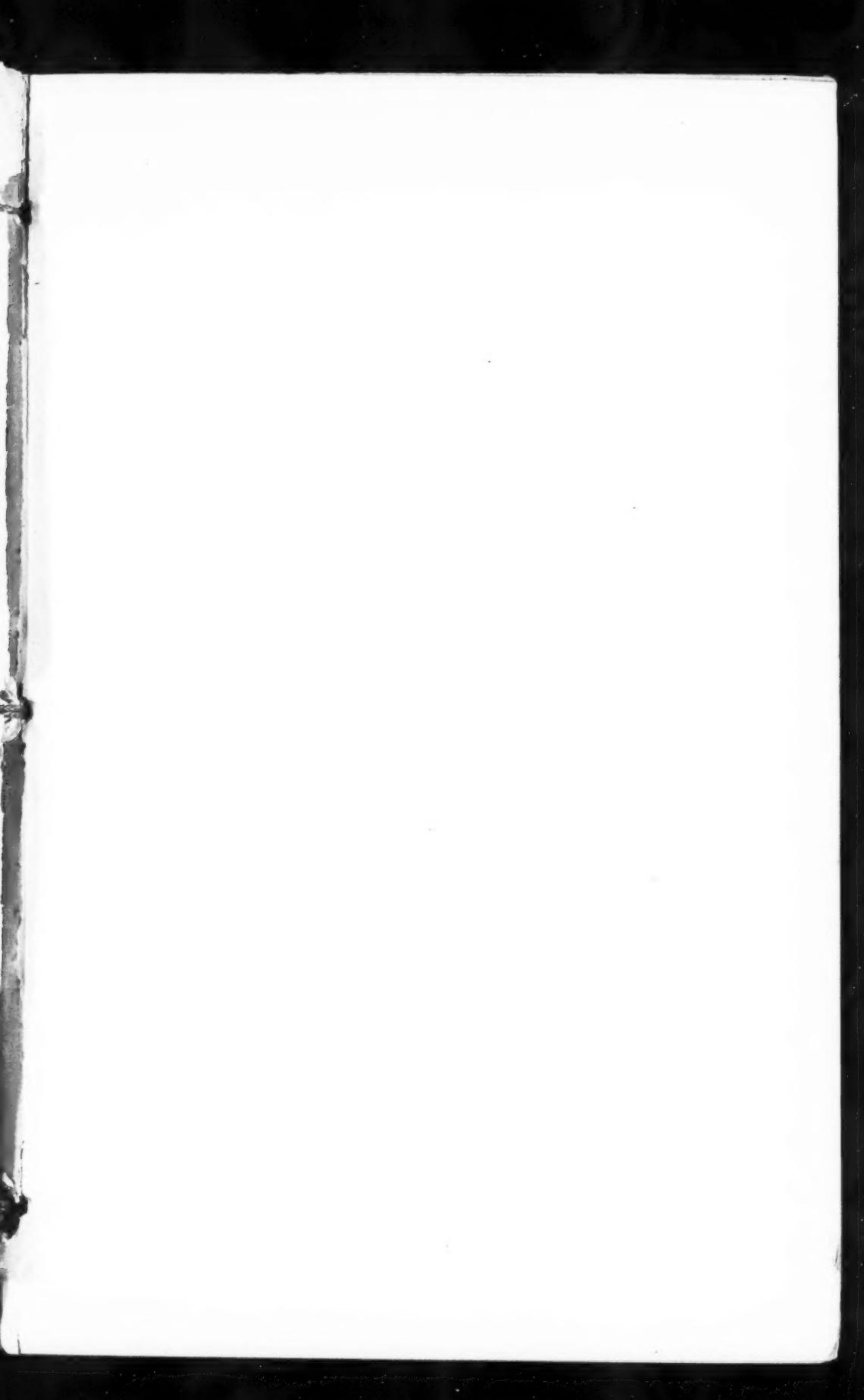
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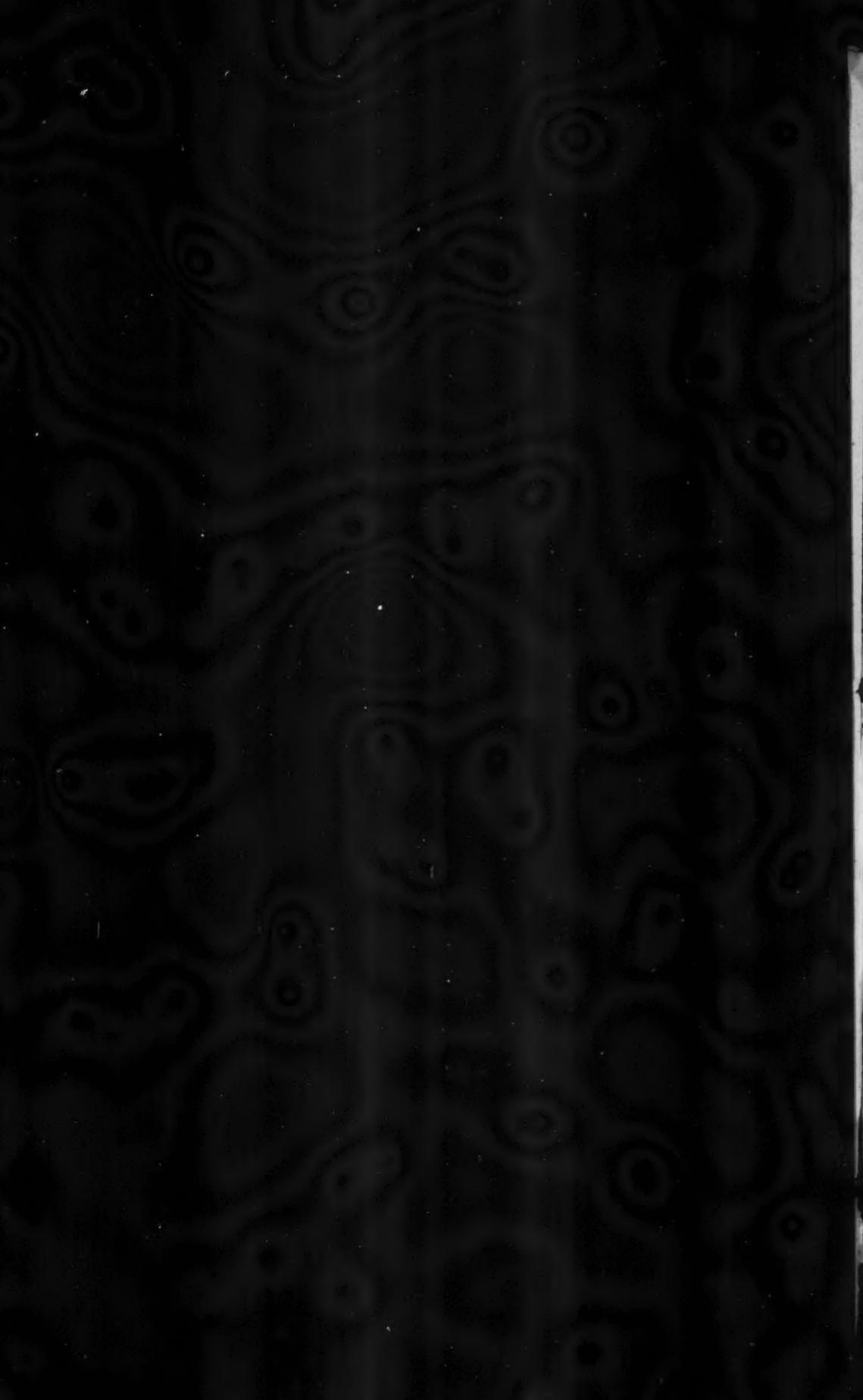




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# AMERICAN JOURNAL OF PHOTOGRAPHY.

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## Dress in Photography.

BY JOHN BARTLETT.

In Shakespear's delightful play, "The Winter's Tale," when the peddler tramp Autolycus appears plumed out in the dress of the prince, the shepherd very naively remarks: "His garments are rich, but he wears them not handsomely."

It is much as Banquo says: "Strange clothes cling not to their mould but with the aid of use."

There are people who look awkward in any apparel, and there are people who, by a certain inborn gentility, make even the most ordinary attire adorn their figures with grace and dignity. Their clothing seems naturally to dispose itself into lines of symmetry, without the need of artful arrangement.

Sterne tells us: "That the sweet look of simplicity which sat upon Uncle Toby's brow assimilated everything around it so sovereignly to itself, and nature had, moreover, written *gentleman* with so fair a hand in every line of his countenance, that even his tarnished gold-laced hat and huge cockade of flimsy taffeta became him; and though not worth a button in themselves, yet the moment he put them on they became serious objects, and seemed picked out by the hand of science to set him off to advantage."

But the photographer might say these gentle folk of nature's own making are like festival days in the calendar, "thinly placed." Like the painters, then, let them

adapt their art to every change of fashion, and still give us something beautiful, and not make fashion answerable for ungainliness or slovenliness in the disposition of figures and the accessories of dress.

Reynolds and Gainsborough, and the other masters of painting, turned to good account the eccentricities of their times, and their works are all the more valuable in illustration of the age in which they lived.

Reynolds, when asked how he could bear to paint the cocked-hats and powdered wigs of the fashionables, answered: "They have all light and shade." Could not the photographer answer in the same way?

Hogarth's costumes, despite their strangeness, are always picturesque in the rendering; often the interpreters of the individuality of the character.

Now-a-days photographers can hardly complain of even a peculiarity in dress. Our styles are by no means as marked or odd in appearance as those of the last century. They lend themselves readily to the picturesque, and may be made to contribute much to the effect of the composition, because fashion is not so arbitrary in its selection as it used to be. It is controlled more by the principles of art, and springs more directly from the demands of utility and comfort.

Nowhere does Raphael show more admirable taste than in the dressing of his figures. He thereby adds grace to grace; yet there is very little of the classic in his compositions. His people are the actual men and women of his time, full of youth, vigor, and beauty. It seems as if his figures had walked from his town right into the canvas, so fresh and natural are they.

Our modern life, too, is full of artistic realities, and our painters are beginning to open their eyes to the beautiful in things with which they themselves are intimately related—finding pictures in our drawing-rooms and parlors, in our workshops, in the streets, in the busy crowd, in frock coats and flounces.

If one were to judge from the work of our most celebrated photographers, the conclusion might be reached, that sufficient attention is not given to the value, or rather the necessity, of the artistic disposition of costume and drapery, although much care is shown in the modulation of the light upon the face, and skill in the technique. "These, ye ought to do, but not leave the others undone."

We recently saw a most excellent portrait of Mrs. Langtry spoiled by the careless management, or perhaps total neglect of management, both of the garment and the accessory hangings, which, if properly considered, would have heightened the effect, but they were discords only, destroying the harmony of the picture, for which even the inborn grace of the superb model was not able to atone.

The folds of a dress may make or mar a portrait. Are they a thing to be lightly considered?

It is not possible to give rules to guide in the arrangement of drapery. There is no such thing as the equation of the curve of a fold in a satin gown. Its subtlety refuses to be reduced to a mathematical formula. It is altogether a question of taste, and one can only direct its cultivation by impulses from the works of the painters.

Rubens, Teburg, Maes, Jan Steen, and other masters of the Dutch and Flemish schools, delight in the delicacy of light and shade in the drapery of their pictures. Study their works from engravings.

As a perception of what is false, is in reality a step towards the knowledge of what is true, the excuse may be pled, where rules cannot be given, for pointing out some of the incongruities in dress which are courted by the photographer, not thrust upon him by necessity, and we

may suggest the means of toning down the occasional absurdities of fashion, or whimsicalities of sitters.

We are indebted to the antique for our standard of human beauty of form, and for a marvellous conception of drapery.

The close adherence of the garment to the limbs, revealing to the imagination the ideal from beneath, is truly poetry in stone; but the attempt which photography sometimes makes to simulate statuary by posing and clothing in a classic style human models, is not only sensational, but ridiculous. It is altogether out of its province. It is too realistic in its rendering ever to suggest the plastic in art, notwithstanding, like sculpture, it depends for effect much upon the subtleties of light and shade.

For conception of beauty in drapery, photographers, as we have said, should look to the painters; should study from the works of Massaccio and Giotto; take suggestions from the flowing robes of Titian's "Assumption;" Da Vinci's "Mona Lisa;" from the splendid brocades and satins of Paul Veronese, Rubens, and Velasquez, and not try to make Galateas, Dianas, and Psyches instinct with life and animation, clothed in tissue, mounted upon wooden blocks painted white to counterfeit marble. Photography betrays too faithfully texture ever to hope to deceive by any artifice, or to delude the imagination. How much more beautiful and appropriate the drapery of real life upon real people.

What grace may be added by length of line in a robe to an attitude in itself graceful, and how often is grandeur thereby imparted to the most ordinary posture. There is an elegance in the long, flowing lines of a lady's habit surely, more becoming to her native grace than the unnatural contortion of crumpled tissue-paper.

Our renowned beauties who, like Cleopatra, have by their charms "taken the world's great hand," show their grace only to advantage when adorned in garments suited to women of flesh and blood.

The mania to be photographed in flimsy garments with gauze wings, like Psyche, is invading the staid ranks of society, and maidens *en embonpoint* fail to appreciate

the incongruities between their avoirdupois and the butterfly wings intended to elevate them to the empyrean.

We know of one case where a fond mother insisted upon having her two little boys photographed like Raphael's cherubs, despite the protestations of the good-sensed photographer. It was done. There they are, with their eyes up-turned towards heaven, as if imploring a kind Providence to pity them and send the ravens with garments to cover their limbs.

A favorite, but ridiculous, method of disposing of the long train of a lady's dress, is to huddle it up in a bunch around the feet, as if in dread it would not find accommodations elsewhere in the picture. This part of a woman's apparel is capable of such a variety of pleasing arrangements that it seems only a perverted ingenuity could make such a disposal of it. The train frequently serves the purpose of breaking the floor line of the picture, and thus really becomes in itself a line of beauty contrasting with other lines.

The old masters sometimes had to deal with ungraceful subjects, imposed by dictates of fashion or whim of the patron, and it is advantageous to learn their plan of treatment.

There is a whole-length portrait by Van Dyke, representing a lady in the dress of the time. When examined closely, the garment is found to be ungraceful in itself, and not contributing to the good effect of the picture. The great painter has, however, neutralized the ungracefulness by a judicious management of the background. By means of a light ground opposed to the light side of the dress, and by help of a curtain which catches and emphasises the light near the figure, he has made the effect of the whole picture full and rich to the eye.

In a full-length figure, a perfectly plain background is difficult to manage so as to give a proper atmosphere, and prevent the figure lying flat upon the surface. The value of drapery will, therefore, be appreciated, and its relation to the dress become of the greatest importance. The background determines where the figure should be relieved, and on judicious management

of the drapery, both in the hangings and in the dress, everything depends. Moreover, the ground, with its curtains, etc., may be useful in making distinct, or in obscuring, certain parts of the figure, as we have seen in the picture by Van Dyke. Now, if the form portrayed is beautiful in itself, it may be seen distinctly, but all angularities must be lost in the ground. Often the picture is made more effective by losing the darker side of the figure in the still darker background, and this dark side may very well be the side with defects.

But we shall wander off, and have our subject lost in the background. We will, therefore, conclude with a few hints for selection or adaptation of material most suitable for drapery.

The texture and the color of drapery are the chief points to consider in selection. New stuffs are apt to be harsh and stiff, and to give angular, unpleasant lines. Soft woolen goods are especially adapted to photographic drapery. Cashmere is rich in its beauty of folds; alpaca, of good quality, is flexible and yielding, and India muslin, without stiffening, readily falls into the most pleasing lines. Madras curtains offer many inducements, both by reason of delicacy of texture and the richness of decoration.

The photographer cannot depend upon his fine artistic eye for color in judging of the effect of drapery. He must ignore color in considering the ultimate effect produced by light and shade. White and blue some years ago were regarded as the bane of photographers. They do not seem to offer the same trouble now-a-days. We have seen most beautiful photographs in which the figures were dressed in white satin or white lace, but the work was from the masters of our art, and we who are less skilled, if we can have any selection, had better choose drapery a little subdued in tint. A weak infusion of coffee or tea is useful in toning down the glaring white of fabrics.

However, we are not permitted to steep the costumes of all our sitters in infusions, and it may be well to know how to overcome the harshness in the negative

from the dazzling white robes of those who will not adapt their costume to the exigencies of our profession. A mass of white drapery impresses itself strongly upon the sensitive plate; therefore, if a strong development is used, the building up of the image will be so rapid that the fine half-shadows will be altogether lost, and we shall have a black and white picture. We must, therefore, use a slow development. The best method of proceeding is first to flow over the plate a developer which is weak, but so constituted that the accelerator (the potash or soda) is slightly in excess of the pyro; that is, reducing the pyro to the minimum necessary to carry on development, using bromide of potassium very cautiously, if we use it at all.

When the detail has fully come up, pour off this developer, and immerse the plate in another developer which you may have at hand, stronger than the first, and with the proportion of pyro and accelerator equal. The negative will now gain in intensity, the shadows will strengthen, while the high lights will remain soft and pleasing, and the whole negative will preserve its relative proportions of tones.

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#### Mounts for Prints.

BY ELLERSLIE WALLACE.

For those who could make up their minds to study such an apparent trifle as the effects of different colors and styles of mounting-cards upon finished prints, we could not imagine a better school, nor a more interesting way of spending a few hours, than for them to be let loose in an establishment where the different styles of cards are made, and to have in their hands a few choice prints to try upon the various colors and qualities of the stock.

Everybody knows how much the effect of an ordinary picture of any kind is modified, either for better or worse, by the frame which it receives. This is quite as true of photographs as of oil paintings, but we desire, for the present, to try to interest the attention of our readers in that which must, in any case, precede the framing, and often, indeed, supply its place entirely; namely, the mounting of the print.

Of all the multitudinous varieties of photographic work produced at the present day, we may select portraits, landscapes (including architecture), and copies of paintings, etc., as requiring especial attention in this respect. In the case of portrait work as a whole, we should say that the size, style, shape, and tone of the print will be found to suit well certain mounts, while producing a decidedly bad effect upon others. Let us, however, except here all such as are intended to be preserved in albums; it will, of course, make no difference what style of card is used in this case, for the effect will then depend upon the page of the album, and the presence or absence of lines, tints, or other ornament.

In reviewing the various styles of mounts for prints that have come under our notice in the lapse of the past five and twenty years, we have always observed that the *worst* effect was produced by a plain white mount. It is quite true that a white card is as good as any other, if it is simply intended to support the print and keep it flattened out, but when we remember that the whole possible scale of tone in the picture must range between white paper for the high lights, and a rather impure black or deep brown tint for the shadows, we might even reason theoretically upon the importance of not bringing white, in mass, into direct juxtaposition with white as the high light of the picture. That this is perfectly true in practice, we need hardly say; but if anyone is inclined to doubt it, let him just take a large sheet of white paper and cut out a piece in the middle the size of any mounted print he happens to have at hand, and then lay it over so as to conceal the mount entirely. Our word for it, he will soon see the difference.

The bad effect produced by the white mount seems to be largely due to the fact of the high lights or whites of the print coming into contact with or very close to it, and may be entirely done away with by interposing a band of some neutral color, such as the well-known "India tint," between the edge of the photograph and the white card. Matters will be now quite changed, so much so, indeed, that if we

were asked to name the most effective form of mount for a fine landscape or copy, or even, in some cases, for a picturesquely posed portrait, we should say the India tint on white. It is not always that the India tint can be had pure; it should be of a delicate buff-color, free from crude yellow or green, and not, as a rule, be very much larger than the print. As it is lithographed upon the mount, and is apt to be somewhat greasy, the mounter should always be instructed to wipe over the tint with a damp cloth or sponge previous to laying down the pasted print, otherwise the mountant will not adhere to the card. Prints made on plain white paper without artificial tint, will best suit this style of mount.

Colored card mounts have been very much used of late years, and it will be found that prints of almost any size or tone will do pretty well on such colors as "tea," "primrose," or light buff, and, perhaps, on "dove" and brown. Where black or dark colors, such as bottle- and myrtle-green, chocolate, etc., are used, the print should be trimmed nearly to the full size of the card, so as to leave but a very narrow margin; for if a wide margin be seen, it will, so to speak, throw the whole affair *into mourning*, and have much the effect of a wide black band on a hat. Portraits of actresses in costume, eminent personages, etc., are now often seen on these colored cards, but we have also seen magnificent effects made with fine landscapes of large size on dark colored cards, in the panel style, with a plain gilded bevel edge. In this case, the print had been mounted on thin drawing-paper, then trimmed to size, and secured to the card by delicate gold-headed tacks at the corners, and along the edges. As the whole had been done with great skill and care, there was no cockling of the thin paper on which the print was pasted, and the appearance was strikingly rich and elegant.

A print mounted on a plain card, of say "tea" color, will not infrequently be improved by one or more black lines drawn around it. It will generally be found that the best effects are to be obtained by keep-

ing the lines fine, in no case exceeding one-sixteenth of an inch in width, and letting them follow the shape of the print itself, no matter what the shape of the mount may be. It will be best, also, to keep them tolerably close to the edge of the print, say from half to one and a quarter inches, depending upon the size. Sometimes a double, instead of a single, line may be thus drawn, and a series of two or more sets applied. The corners where the lines meet may either be square or the lines may each be continued on a short distance, so as to make a cross. In some cases, a neat gold line will have a pretty effect, but, as a rule, the less gilding about the mount the better.

The color of card to be selected will depend on the taste of the photographer, but it may be well to caution him against those containing even a small amount of rose-color or blue—that is, for silver prints—for the whites will always look yellow and faded when contrasted with these tints. As we said in the beginning, if a trial can be made by laying a few good prints on the different colors and styles of cards, let it be done by all means, but in making the experiment, one color at a time should be selected and removed from all other colors, so that the eye may not be confused by a number of them. It will soon be seen how colors, when brought together, modify each other.

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#### The Origin and Technology of Photographic Chemicals.

FRANK H. ROSENGARTEN.

##### Fourth Paper.

*The Alkalies.*—After the haloids and silver salt, treated of in former numbers, come, with equal gravity, the alkalies, as essential reagents in photographic work, for they creep in at all corners of our processes. Soda and potash and ammonia are used either as such, or in combinations with acids, and at every turn they confront us. So they prevail in all our existence, and they are, probably, more universally distributed through nature that any of the elements, not excepting carbon.

Chloride of sodium is found essentially

in the organized life of plants and animals and in our food, and potash salts are as essential to the growth of cereals and sugar producing plants.

The great source of the alkali soda is this widely distributed chloride of sodium, which we find in the oceans, and, as rock, in parts of the earth, or by percolation of water into such rocks, in deep wells. In the solid state, called *rock-salt*, *fossil salt*, and *sal gemmae*, it is often found forming extensive beds, and even mountains, from which it is extracted in blocks or masses by mining operations. In Poland, Hungary, and Russia, in various parts of Germany, particularly in Tyrol, in Cheshire, England; in Spain, in various parts of Asia and Africa, in the island of San Domingo (where the deposit forms a mountain six miles long, from one-half to a mile broad, and from 400 to 500 feet high, and containing 96.79 per cent. of pure chloride of sodium), and in Peru and other countries of South America it is found. With the exception of a remarkable bed of rock salt in the island Petite Anse, in Vermillion Bay, on the coast of Louisiana, there are no salt *mines* in the United States, east of the Rocky Mountains; but there are innumerable salt springs, which either flow naturally or are produced artificially by sinking wells, found in Missouri, Kentucky, Illinois, Ohio, Michigan, Pennsylvania, Virginia, West Virginia, and New York, in which state the greatest production occurs of finished salt. In Virginia, on both sides of the Great Kanawha river, and in Michigan extensive wells are pumped. In Michigan the product of finished salt was over 4,000,000 barrels per year. The sea water of the ocean contains about 2.7 per cent. of common salt, and this product is called *bay salt*. On the Mediterranean Sea are the principal works for its production, as the water contains more salt there. The sea water is run into shallow dikes lined with clay and shut off from the sea. The hot rays soon evaporate the water and the salt deposits, and then more water added, and the process repeated until the quantity of salt warrants its removal.

To make an interesting résumé of this universal product would take more space

than we have and yet it is fascinating, for but little change has been made in the processes of production from the earliest historical times.

Salt, or chloride of sodium, is white, without odor, and of a peculiar taste called saline. It is usually crystallized in cubes; but by hasty evaporation it often assumes the form of hollow quadrangular pyramids, or hopper shaped crystals, consisting of an aggregation of cubes, it is permanent in the air and of neutral reaction. It dissolves in 2-8 parts of cold water, and in 2-5 parts of boiling water, and almost insoluble in alcohol. A fragment of the salt imparts to a non-luminous flame an intense yellow color, not appearing more than transiently red when observed through a blue glass. When pure it undergoes no change in the air, but when contaminated with chloride of magnesium (bittern), as not unfrequently happens, it is deliquescent. In a pure state it consists of one atom of chlorine and one of sodium and has no water of crystallization, the common salt of commerce, generally contains insoluble matter and more or less of the sulphides of calcium and magnesium and their chlorides. Chloride of magnesium is found in it, sometimes to the amount of 28 parts in 1000. In use as food, it is a tonic in small quantities, in larger ones is a purgative and emetic. It promotes digestion and is essential to the animal economy. The chemists and metallurgists of this time are all striving to eliminate cheaply the wonderful metal sodium, but the strong affinity it has for chlorine makes the process difficult and costly. This metal is very peculiar and was discovered by Sir Humphrey Davy in 1807 by the aid of galvanic electricity, and afterwards produced in larger quantities by Gay Lussac and Thenard by bringing the alkali in contact with iron turnings heated to whiteness.

It is a soft, malleable, ductile solid of a silver-white color, and metallic lustre in a high degree, when protected from the air, by which it is quickly tarnished and oxidized. Its specific gravity is 0.97, being higher than water, and it fuses at 95.6° centigrade. When thrown upon cold water, it instantly fuses into a globule without

catching on fire, and travels over the surface rapidly in different directions; but on warm water, it ignites and the water is decomposed, hydrogen is liberated and the oxygen combines with it to form oxide, and if simply exposed to the air, it undergoes a slow combustion which renders it luminous in the dark.

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### Intensification.

BY W. B. BOLTON.

(A communication to the Glasgow Photographic Convention.)

I heard an amateur remark a short time ago, "I never intensify," and felt inclined to retort. "Perhaps it would be better if you did;" but as I thought he might recognize the truth of the reply, and I did not wish to hurt his feelings, I refrained. It is all very well and very pleasant, no doubt, to be able to dispense with the operation of intensification, but who that values his reputation for uniformly good work will undertake to do without it altogether? It is absolutely necessary at times, even under the best of arrangements and the most careful working, and he who says, "I never intensify," is either a *perfect* manipulator—which I don't believe—or a careless one who takes little pride in his work, which is more likely.

But intensification has got into sad repute in connection with gelatine plates, owing to the liability of the intensified image to change, fade, or become denser with time and exposure to light. This applies equally to all forms of intensification, though mercury in some of its forms, has secured the worst reputation; still, I have little hesitation in expressing the opinion that the instability is not due to the method of intensification, but to the want of care in preparing the film to receive it. I have negatives which were intensified seven or eight years ago, by one of the most distrusted of mercurial methods, that are as good to-day as when newly done. I have on others every form of defect that can come from mercurial change.

Silver intensification, on the other hand, though the practically universal method employed with collodion plates has gained

little favor with gelatino-bromide workers, on account of the liability to stains and discoloration of the film during the operation itself; while it has even been alleged that a gelatine film which has been touched by a solution containing a soluble silver salt is doomed to discoloration sooner or later. With regard to the liability to stains, I have frequently endeavored to show that it is far easier to prepare the gelatine film for silver than for mercurial intensification, but the difference is that a degree of carelessness that suffices in the case of silver to produce immediate change, will be tardy, though no less sure in its effect, when mercury is employed. The change produced in the one case, is, in fact, instant and complete; in the other deferred, gradual, and incapable of check. With silver and only moderate care, the change or stain may be but slight; with mercury, under similar circumstances, the utter ruin of the negative is only a matter of time.

As concerning the alleged after-deterioration of silver-intensified negatives, I can only say that I have some that were treated in that manner in the summer of 1880, and which, up to the present time, have exhibited not the faintest sign of any sort of change; and I will say further, in connection with them, that if there be any virtue in the oft-vaunted "wet-plate character," they possess it in a far greater degree than others treated in a different manner, or not intensified at all.

Silver intensification is, and always has been, my favorite, where permanency of result is required (if a negative be only required for temporary purposes, it is not worth the trouble), and recently I have modified my method of using it. Previously I have adhered to the formula frequently given in the *Journal* and *Almanac*, in which plain solutions of pyro, and of silver acidified with citric and nitric acids are used; but latterly I prefer to employ a solution of pyro, citric acid, and glycerine, with a separate solution of silver acidified only with nitric acid. The advantages of this method, are, that the solutions will keep indefinitely, or practically so, and that the glycerine causes the solution to flow readily over the film, enabling the

operator to use a very small quantity by pouring on and off the plate, and thus economise silver, as well as saving the trouble of freeing the back of the negative from the dense deposit of silver that occurs when a dish is used.

I make the following stock solutions:—

A—Pyrogallic acid . . . . 10 grains
Citric acid . . . . . 2 "
Glycerine . . . . . 1 ounce
Water . . . . . 1 "
B—Nitrate of silver . . 60 grains
Nitric acid . . . . . 30 minimis
Water . . . . . 1 ounce

For use, dilute one part of A with two parts of water, and pour on to the plate, leading to the edges with the finger or a camel-hair brush, if it refuse to flow alone. One drachm of pyro solution mixed with two drachms of water suffices for a half-plate. When the solution runs smoothly over the whole surface, return it to the developing-glass, in which a half-a-dozen drops of B have been placed, and again apply the mixture to the film, keeping it in motion all the time. The density comes rather slowly, and should be borne in mind that it increases greatly on drying the negative, so that allowance must be made for that.

The only preliminary preparation the negative requires after fixing, is a thorough washing, but this may be supplemented by a minute or two's soaking in alum and hydrochloric acid as a final precaution. Removal of the hypo by means of eliminators, instead of by washing, is worse than useless; besides which, other substances, as the hypochlorites, hydroxyl, or even alum, when long applied, destroy the power of intensification. The negative, is therefore, better if simply washed. Should a slight yellow stain appear after prolonged treatment, it is easily removed after the operation is complete by a short re-immersion in the alum and hydrochloric acid, provided it is only silver stain and not hypo. The final dip in alum and hydrochloric should always be given, in order to destroy any free silver that may remain.

Intensification is more rapid before fixing than after; but, unfortunately, with

gelatine plates, it is most difficult to judge accurately of the density. It may often happen, however, that when a very thin image has to be treated, the application of the intensifier before fixing will prove advantageous.

[Translations from the Foreign Contemporary Press, by E. W.]

#### Rapid Printing of Positive Proofs by means of Bromo-Albuminate of Silver.

One of the most interesting questions in behalf of the amateur photographer at the present day is the rapid printing of positive proofs either on paper or on glass, in the form of transparencies for the lantern or for the window.

The results obtained by us in our special studies of the different papers and sensitive films prepared with gelatino-bromide of silver, gelatino-chloride, etc., have shown what is to be expected from them in the advance of the industrial arts.

The amateur who is eager to ascertain the value of a negative that he has just finished, can now also have his positive proof within a short time after development, thanks to the new process.

The professional photographer can now print by night as well as by day, and so satisfy his customers by furnishing proofs in a very short time. The process now to be described will give prints rivalling in brilliancy and beauty any hitherto obtained by the use of silver salts.

During the dark weather liable to occur at any season of the year, and which is almost continual during the winter, it is no easy matter to print a sufficient number of proofs in a very short time. By using the following process, we have been able to print very rapidly and without the slightest difficulty in unfavorable weather.

Paper is floated on albumen containing 2 grammes (31 grains) of bromide of potassium to every 100 cubic centimètres (3½ oz. fluid) of albumen, and sensitized on a silver bath of .15 per cent. strength. It is then carefully washed in repeated changes of water and dried.

Under a negative of moderate density, a few seconds exposure with the alkaline

developer given below, or with ferrous oxalate as used for gelatine plates, will give proofs as fine as those obtained by the process now in vogue.

After either method of development, the proofs are fixed and washed in a manner similar to paper prepared with chloride of silver (albumen and plain papers). If very rich tones are desired, they may be regularly toned either before or after fixing, the fixing being done with hyposulphite of soda (15 per cent. solution), or sulpho-cyanide of ammonium (30 per cent. solution). This latter is *very poisonous*.

Having succeeded well ourselves with this process in dark weather, we hope that it may prove serviceable to those compelled to work in a poor light.

Developer (Max Boelte in *Phot. Archiv.*)

No. 1.

Boiling Distilled Water . . . . .	500 parts.
Sulphite of Soda . . . . .	100 "
Citric Acid . . . . .	8 "
Pyro . . . . .	15 "

No. 2.

Boiling Distilled Water . . . . .	500 parts.
Carbonate of Soda . . . . .	25 "
Potash (probably <i>Carb. Potass.</i> )	25 "

Mix one part of Solution No. 1. with 1 part Solution No. 2 and add one part water.

—*Amateur Photographe.*

F. Stolze's Method of Testing Emulsions for Acidity and Alkalinity.

The acid or alkaline reaction of emulsion well known to be by no means unimportant as regards the keeping qualities of the same, the latter (alkaline) being apt to cause fog on the edge of the plate. On the other hand, however, it is not desirable that the acidity be too marked, inasmuch as the sensitiveness is thus injured, and the gelatine loosened in structure. When either the acid or alkali is present in but small amount, it will be found very difficult if not impossible to determine the reaction by means of litmus paper, but the following simple method may be employed: coat a glass plate with collodion containing *aurine*, and allow it to dry. As is well

known, aurine is absolutely insoluble in water if an acid be present, but if there be even a faint alkaline reaction it will dissolve and show a fine carmine tint. If a few drops of the emulsion to be tested be poured on the aurine-collodion film and worked over it, the film will remain colorless if acid be present. But if there be the least alkalinity, the film will soon show a rose-color. This test is unmistakable and of very great delicacy. A number of tests may be made on the same plate. We advise all who make their own emulsions to employ this test regularly, and if the rose-color is seen, to then add glacial acetic acid drop by drop to the emulsion until the film remains colorless.—*Wochenblatt.*

On Red and Purple Chloride, Bromide, and Iodide of Silver; on Heliochromy, and on the Latent Photographic Image.

BY M. CAREY LEA.

(American Journal of Science.)

ACTION OF FERRIC CHLORIDE ON METALLIC SILVER,

It has been long known that silver was blackened by ferric chloride, and this action has been proposed in the text-books as a means of obtaining sub-chloride, for which it is quite unsuited.

Ferric chloride acts on silver much as sodium hypochlorite does, but less rapidly. With hypochlorite the action is complete in a few hours, or often in an hour or less; with ferric chloride one or two days are required before the product ceases to yield silver to hot dilute nitric acid. In both cases the action seems to be alike in this: that no sub-chloride is finally left uncombined with normal chloride.

The product is an intensely dark purple-black when the action takes place in the cold. With heat continued for many hours, ferric chloride can be made to attack the purple salt, and gradually convert it into AgCl. With a strong solution in large excess, kept at or near 212° F. for sixty hours, the color was gradually reduced to pink, and finally to a dingy pinkish-gray. Pure white cannot be obtained, as it can by aqua regia.

In order to observe more exactly the course of the action, a strong solution of ferric chloride was allowed to act on reduced silver in fine powder for four minutes, and then a fresh portion (always in large excess) for the same time. Analysis showed that at this stage of the action the material contained :

Ag (determined) . . . . .	76.07
Cl (by difference) . . . . .	23.93

If we supposed that all the silver was combined with chlorine, the constitution of the substance would be :

AgCl . . . . .	92.49
Ag <sub>2</sub> Cl . . . . .	7.51
	100.00

But this was probably not the case ; there was almost certainly free silver present, and consequently a less proportion of sub-chloride. Another specimen, treated repeatedly with hot acid until every trace of free silver was removed, was found to contain 1.52 per cent. of sub-chloride, color purple. Another similarly treated contained 7.3 per cent. of sub-chloride.

#### ACTION OF NITRIC ACID ON SILVER SUB-CHLORIDE.

When freshly precipitated and still moist sub-chloride of silver is treated with nitric acid, a sharp effervescence, accompanied with a disengagement of red fumes, sets in; presently the strong red coloration of the photo-chloride appears, and the action ceases. This production of the red and not the white chloride in the decomposition of Ag<sub>2</sub>Cl is precisely what might have been expected, for when AgCl is formed in the presence of Ag<sub>2</sub>Cl, more or less combination always takes place.

The action is interesting in this respect : the AgCl first formed is, at the moment of formation, in presence of all the yet undecomposed portion of Ag<sub>2</sub>Cl, and whatever part it combines with is removed from the action of the acid. It would, therefore, seem probable that this method would be one of those that yielded a product having the largest proportion of Ag<sub>2</sub>Cl, but analysis showed that different specimens were extremely variable ; of those analyzed, one

contained 8.62 of Ag<sub>2</sub>Cl, another 6.56, and a third 1.96. All that analysis can do with such substances is to fix the limits within which they vary. The quantity of sub-chloride left after treatment with nitric acid depends partly on the strength of the acid and the time for which it is allowed to act, but also, to some extent, on variations in the resistance of the substance itself. These specimens were of shades between rose and purple.

The color of any particular specimen is always lightened in shade by abstracting Ag<sub>2</sub>Cl from it by continued boiling with nitric acid. But as between different specimens—especially when formed by different reactions—it by no means follows that the darkest in color contains the most sub-chloride.

Argentous chloride, when treated with sodium hypochlorite, yields a purple form of photo-chloride. A specimen so treated contained 2.57 per cent. of Ag<sub>2</sub>Cl.

#### ACTION OF CUPRIC CHLORIDE ON SILVER.

When metallic silver is submitted to the action of either cupric chloride, or, what gives the same result, a mixture of copper sulphate and ammonia chloride, an action takes place very similar to that of ferric chloride, but more energetic, and the resulting red chloride is apt to be lighter in shade, though in this respect it varies very much. As in the case of ferric chloride, this action of cupric chloride on silver is given in some text-books as a means of obtaining argentous chloride, for which purpose it is as little suited as the iron salt.

As a mode of obtaining the red chloride, it is not to be recommended. It is troublesome to get the copper completely removed.

A specimen analyzed was found to consist of white chloride, with 6.28 per cent. of sub-chloride.

#### ACTION OF PHOTO-CHLORIDES ON SILVER SOLUTIONS.

*Cuprous Chloride.*—When very dilute solution of silver nitrate is poured over cuprous chloride, a bulky black powder results, which by boiling with dilute nitric

acid turns red, the acid extracting little or no silver.

*Ferrous Chloride.*—When silver nitrate is dissolved in a slight excess of ammonia, and this solution is poured into a strong one of ferrous chloride, there results a precipitate, which is sometimes grayish, sometimes olive-black. By washing with dilute sulphuric acid, this product becomes brownish purple, and brightens by boiling with dilute nitric acid. It was found to contain 4.26 per cent. of sub-chloride.

(To be continued.)

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#### A Journey Through Arabia Petra with the Camera.

BY WILLIAM H. RAU.

(Continued from July Number.)

On the morning of the 28th of March, 1882, we arose unusually early, trouble seemed to be in the air. We anticipated some disturbance with the unruly fellahin, who were especially annoying. They had somehow gotten wind of our intended departure on that day, and redoubled their efforts at exactions, realizing the fact that the golden opportunity to fleece us was slipping out of their reach. During our breakfast, an old villainous looking fellahin presented, through the entrance of our lodge, a matarak. Unthinkingly it was accepted by Mr. Ogden, and hung upon the fly of our tent. This was the prelude to a scene which cost us hours of vexation, inasmuch as £10 was demanded for the matarak. We, however, finally succeeded in compromising to such an extent that it was granted us to visit the Deir, a beautiful temple some distance from the camp. We were accompanied by two guides, Mohammed and another Bedouin. Meanwhile our dragoman, Hadaya, arranged with the natives to get us and our luggage safely out.

The entrance into Petra had been easy enough, but our fears were now lest we should have a struggle to get out. Our start was made at 6.30 A. M. After crossing the valley in which the city was built, we came to a gorge to the north. The ravine was wide at the opening, but soon became narrow and choked up with enormous

rocks. Progress would have been impossible had not we made use of the rocky stairways which the ancient people had cut. The steps were much worn, but we were grateful for their aid.

The ancient dwellers of Petra seemed to never have taken in consideration the expenditure of any amount of labor and cost to facilitate access to their splendid monuments placed at the summits of the mountains.

This gorge, whose walls were more than 1500 feet in height, had a superb stairway leading up to the great tomb or temple which the Arabs call El Deir, or the Convent. The ascent was tiresome, and not accomplished without the expenditure of much labor, so that we did not reach the summit until 8.15 A. M. But all our toil and hardship was at once forgotten at the sight of this noble structure. We stood before it, wrapt in admiration of its stately proportions and classic grandeur.

Burkhardt, who visited Petra in 1811 disguised as a Mohammedan pilgrim, seems to have known nothing about the Deir, not making any mention whatever of it, and Irby and Mangles, in their graphic description of Petra, were permitted to see it through a telescope only, miles away. Laborde, a French traveler, was the first to visit and explore it.

We appreciate, therefore, our privilege of having a sight of this glorious work, the architecture of a people whose very name seems to have been lost until the most recent times. Out of the solid rock it stands sculptured, an enormous monolithic monument, silent, but pregnant with memories of the past. It is almost perfect in preservation, resembling somewhat the Khuzneh. Its facade, however, is broader (150 feet), and its height greater. It is not quite so rich in detail of profuse ornamentation, but is more chaste and classic in style, the ornamentation being more an essential part of the structure. The interior is a single large chamber, plain, with the exception of a sculptured niche facing the great door, which is reached by the ascent of several steps.

The Deir faced Mt. Hor, the famous summit on which Aaron died.

Dean Stanley said that Mt. Hor is, perhaps, the only mountain of Scripture about which there seems to be no doubt as to its authenticity. We were not allowed to approach the holy place, the Arabs deeming it sacrilegious to permit the profane foot of the infidel to touch even its sacred base.

Opposite the Deir is a lofty rock, reached by an artificial causeway, on top of which we found a level platform. Here we saw the remains of a line of columns, the bases of which are still in place; these, no doubt, at one time formed the portico to an excavated temple, square in shape, and with a carefully sculptured niche at the bottom. From this platform, or terrace, we enjoyed an extended panorama of Petra. We beheld the narrow gorge up which we had labored, Mt. Hor, and the desert beyond. We secured a complete series of pictures of all, and reluctantly started on our return down the gorge.

Reaching the valley about 11 A. M., we found much to engage our camera at work, especially about the rocks on the west. However, we contented ourselves with making negatives of Ksar Pharoun, the only built-up structure in Petra, also an unfinished tomb near by.

The Ksar Pharoun, or Pharaoh's Palace, is not in a very good state of preservation. It is rather plain in appearance, with only a frieze and cornice, ornamented in good taste. The interior was at one time plastered and ornamented in stucco. Time has effaced nearly every trace of ornamentation. Sections of the tessellated pavement still remain on the north side. Near by on the cliffs was an unfinished temple which showed the plan of construction. The rock was shaved down in a perpendicular direction, and after the front had been thus made smooth, the design was marked out in four columns; next, the capitals were fashioned, the sculptors beginning at the top and working down towards the bottom. We secured a fine picture of this unfinished temple, and then made our way towards a large group of Arabs coming in our direction, headed by Hadaya. Our photography was to cease, we read trouble on our faithful dragoman's

brow. He seemed childish at times, so worn out was he by constant watching and with the harassing of the Arabs. He informed us that our luggage had gone on ahead, under the care of Abdallah (our servant). He was uncertain whether it had reached the Wady Araba safely, but he hoped so. It is customary for the Bedouin to escort visitors from Petra—this escort was a guard of honor, whose services would have been more appreciated in the breach than the observance. On reaching the top of a hill or pass, they went through the customary Arab salutation, and we flattered ourselves we might now set off. Still, something seemed lacking. Sheikh Salim thought they should be paid for escorting us so far. We accordingly gave them £2. They feigned to be insulted with so paltry a sum, and indignantly threw it at Hadaya's feet, making preparations for a grand clearing out. Another pound was offered, and refused. Finally, after 30 minutes quarreling, during which time swords, pistols, and guns were fully displayed, the offer of £5 was accepted, and the Bedouin extortioners left us; but there still remained the fellahin, whose chief followed menacingly with his enormous wide-mouthed pistol, a small cannon, pointing at our dragoman, evidently making demand for his associate devils. Another half-hour of disputing followed, during which the whole of Salim's crowd came charging down on us to assist us out. A settlement was made by giving the Sheikh of the fellahin £2.

They now dropped away from us, as we slowly moved along on our camels, until but a few remained, among whom was Mohammed, our guide of the morning, a very fierce, fine-looking fellow. He was, it was easy to see, impressed with the success of the others at extortion, and thought it an opportunity to look out for himself. Our dragoman refused his demands, telling him to *imshee* (clear out), but he drew his sword and made a terrific cut at Hadaya, which fortunately only glanced his leg, cutting through his baggy, silken trousers, doing no harm. Had Mohammed been mounted, the cut might have been serious. Hadaya hereupon loudly called

for Salim, demanding protection until we should get out of Petra. Four or five Arabs, mounted on horses, with Salim at the head, came dashing towards us, and, on the payment of money, Mohammed was driven away; another payment followed for the short escort they gave us. Salim now dismounted, and walked some distance with us, to insure our safety. On his departure, we found that he and Hadaya had a personal dispute, the nature of which we were ignorant until some time after. It appears Salim demanded £6 for a new red coat. Hadaya called to us, and said, excitedly, "Now I shall kill him." Seeming on the verge of frenzy, a lively discussion followed, which terminated in the giving of the £6 to Salim.

We set out, after the usual Arab ceremony of kissing and embracing one another, and Salim raising both hands up to heaven, wished blessing and peace upon us, and expressed the hope that Allah would be with us. It seemed like the rankest kind of hypocrisy and mockery of blessings when the palaver was translated for our benefit.

We trudged along for a short time in peace, but suddenly we were startled by the appearance of a fellahin who demanded money for a sheep which we had eaten in Petra. Little attention was paid him, notwithstanding his energetic demonstrations with his raised gun. Finally, he grew bold or desperate, and seized hold of the halter on Mr. Ogden's camel, pulling vigorously at it, and gradually bringing the beast to a kneeling position. Hereupon the rider, thoroughly worked up with this culminating result of the day's annoyances, excitedly pulled out his revolver, and would have shot the miscreant had we not (fortunately for the whole party) timely prevented him; it is almost certain our destruction would have been sealed, and the account of the journey to Petra never written.

The fellahin, when urged, confessed that he was a poor man, begging two francs. We suffered him to go along with us, but did not give him any money.

Sheikh Aouda, who had paid a friendly visit to the Bedouin of Wady Mousa, and

was returning to Gaza, joined our party, and agreed to act as a guide. Soon after this the old fellahin who had passed in the matarak (a camel stick) appeared, and demanded £10 for it. He clung to us like his brethren, until Aouda gave him a severe thrashing; striking him a number of times on the head with a heavy stone pipe-bowl. This effectually drove him away, so we thought. Suddenly, however, Hadaya called out, "Gentlemen, we must fight! Get off your camels, we must fight!" We saw nothing at first, but soon distinguished a row of musket barrels pointing at us from behind some rocks. We were ascending a hill, and were taken at a disadvantage. There were only two revolvers with the party, Mr. Ogden's and an old one of Hadaya's. The latter rushed on ahead of us, and fired several shots, crying "Sahib! Sahib!" (friends.) This brought the men from behind the rocks, who proved to be some of our own Arabs from Akaba. Half an hour we slowly descended towards the broad Wady Araba, when suddenly a shot fell near us. On looking up, we found our fellahin of the matarak standing on a hill above us. Four of our men ran towards him and fired, but missed him. Calling to him to come down, he held up his hands and surrendered. It was decided to tie and leave him. He seemed willing, and they began tying his hands before him, when someone suggested tying them behind; but when this was attempted, he resisted. Hadaya, now thoroughly wild with rage, rushed at him, seized him by the elbows, and tripped him with his foot. The man dropped, striking his head on the hard stone, and causing a slight flow of blood. This was serious: blood had been drawn—blood money must be paid. The tying process was abandoned, and Hadaya kissed him. After some discussion, he agreed to accept 10 francs, but where should we get it—our party was drained dry. Our friend of the sheep was searched, and enough found on him to borrow that amount, which was handed over to the injured man, and we again began the descent, going as fast as we could, and resting at 3.30 to lunch. None seemed to take much interest in eating, and we again

started, sending several men ahead to scout for us, reaching our camp in Wady Araba at 5 o'clock, very tired and worn out. During all of our trouble, our own Bedouin from Akaba acted most cowardly, and were of no service in protecting us. Again, we did not know what all the trouble was about until it was explained by our dragoman, thus being unable to render any assistance. Although the Bedouin and fellahin of Wady Mousa were armed to the teeth, their arms were very inferior, excepting their swords, which were of Damascus. Still, they were bold and courageous, and not at all cowardly. Their appearance was devilish, as they wear a dark-blue burnous, or kofeeyeh, confined with a cord of camel's wool, drawing the corners of the burnous up over the ears and under the agal, allowing the points to project like horns, and showing only their eyes. They ride horses, and carry spears from 10 to 15 feet long, with broad, pointed blades at least 24 inches long. They were not at all religious, and are easily amused. When Mr. Birnie took off his eyeglasses, they thought he was taking his eyes off.

It is said by former travelers that serpents and lizards abound in the desert, yet in our forty-five days' travel, no member of our party saw one.

Nearly all the pictures were made on Carbutt's A plates, and some on B. I have many times been complimented on the quality of the results obtained, which I attribute, first, to experience in handling dry plates; next, to slow plates—giving full or over time; slow oxalate development, with plenty of bromide, and in making quick pictures, using portrait lenses. Yet, strange to state, the views of such a wonderful and almost unknown region, made with so much care, and under so many difficulties and dangers, and costing so much time and money, do not meet with a ready sale.

OUR JOURNAL is issued much earlier this month than usual, in order to be in time for the Convention; and to stimulate any foolish photographer who is hesitating whether to attend or not. Remember the

injunction of St. Paul: "Forsake not the assembling of yourselves together as the custom of some is."

The great teacher of the Gentiles knew the paramount importance of unity and co-ordination of interests for the growth and success of the new religion.

Some of our stay-at-home brothers, however, are wiser in their own conceit, and you know of whom there is more hope than of them.

#### Chicago Convention P. A. of A.

##### RULES CONCERNING EXHIBITS AND COMPETITION FOR PRIZES.

The rules adopted for exhibits of photographs in the Art Hall, and competition for Association and private prizes, have been modified to stand as follows:

All exhibits competing for Association prizes must be without frames or glass. Pictures may be fastened to boards covered with cloth or paper, and a neat moulding, not exceeding one inch in width, may be put around the edge of board, to give a finish.

No signs of any description shall be allowed to be placed in the stalls devoted to the display of photographs, except one card to every exhibit, said card not to exceed 7x10 inches in size, and to contain only name and address of photographer whose work it represents.

This shall not prevent the use of card-mounts with the photographers address, and any picture may have its title or subject neatly inscribed thereon, but nothing of an advertising nature will be permitted.

No pictures will be allowed in the Art Hall that have any marks indicating what plates, lenses, paper, etc., were used.

Parties displaying pictures in competition for private prizes, shall be allowed to place on each picture, or collection of pictures, one small card or tag, not to exceed 2x4 inches in size, with a private mark, which is to be made known to the judges only.

Exhibits conflicting with this rule may be displayed in the Stock Dealers' Department, to which above rules do not apply.

*Executive Committee P. A. of A.*

**Hints on Posing.**

BY J. A. SHERWOOD.

**Art is nothing unless reduced to a science.**

**Attitude should be in harmony with age, stature, habits, etc.**

**Position natural, muscles relaxed. Decide which side of face.**

**Hair—Combs and ribbons are accessory to the face.**

**Eyes—Eyes should be turned one-third further than face, oblique sighted; profile looking down as in reading; deep-set eyes and wrinkles require a broad front light; for wrinkles use diffuse light.**

**Nose—if crooked, head should be in profile, on the side least shown.**

**Mouth—if crooked, part drawn down, foreshortened and in profile; to prevent wrinkles in the lips, request the sitter to moisten them in the usual way.**

**Shoulders—if broad, turn partly sideway to reduce.**

**Hands—the position should compose well.**

**Arrange personal adornments and furniture used in composing. Buttoning and unbuttoning the coat changes from stout to slender.**

**Round face—Use more top light.**

**Long thin face—Use more side light.**

**Front view of hollow cheeks, three-fourth and profile of round faces.**

**Lighting—Pure, decided; shade according to complexion.**

**Background—Right shade for dress and complexion; shade of sitter opposite of light side of background.**

**Expression—Create in the mind the sentiments desired to be portrayed.**

**Keep up the conversation—use ridiculous toys.**

**Our Picture.**

There is always a demand for first rate portraiture. The difficulties connected with the production of artistic work are much greater in this than in any other branch of photography. The landscape photographer has more abundant material at hand,

allowing more latitude in combination, more scope for effect, nor will his shortcomings be so easily perceptible. A portrait stands solely on its own merits. It is either good, very good; or bad, very bad: there is no compromise for indifferent work. How often do we hear the complaint that year after year our exhibitions of oil paintings are crowded with pictures of people about whom we know nothing, about whom we care less, yet these very pictures might be made interesting.

It is not because they are of commonplace people that artists pass them by with indifference. Rembrandt, Reynolds, Rubens and Gainsborough, painted just such people, but they had the faculty or genius, let us say, to make the commonplace instinct with their own thought and sentiment. It is within the power of almost any amateur to make a portrait which shall look more like the sitter than anybody else, but to make the face mirror the soul is the work of an artist, whether he uses the palette and brush, or the camera and lens.

We would not say camera and lens had we not seen simple photographs in which the face had a peculiar sweetness of expression, which seemed to actually tell the very thought passing through the mind of the sitter.

Perhaps you may say such portraits are only happy accidents. We will acknowledge it, and yet hold our belief. The existence of such expression proves that the pencil of light can fix beauty, whether design or fortunate circumstance call it forth.

To produce first-rate portraiture demands from the photographer, just as it does from the painter, not only talent and skill, but a certain amount of general culture.

Let photographers keep to the high standard and regard more what they call fastidiousness of their customs, and people will take as much delight in looking at portraits in an album as they do in looking at landscapes.

A portrait, like a sonnet, however, is always more interesting when we are acquainted with the subject. Shakespeare's, marvellous lines would have more human

motive did we but know who was the "only begetter of them."

We are delighted, therefore, to give our readers a series of beautiful subjects, favorites of the footlights, from the studio of Mr. Kuebler, of Philadelphia. Mr. Kuebler has gained much renown with the histrionic profession by his artistic poses, and his excellent work has a wide reputation with the general public.

The characters need no introduction, as they are familiar to all who take delight in the popular operas or plays of the day.

THE Photographic Society of Great Britain will hold the exhibition for 1887 in the gallery of the Royal Society of Painters in Water Colors, 5A Pall Mall East, London, S.W.

The exhibition will remain open daily (Sundays excepted), from Monday, the 3d of October, until Monday 14 of November.

*Medals.*—Medals will be placed at the disposal of the judges of artistic, scientific, and technical excellence, and the judges are instructed to reserve three medals for portrait or figure subjects, one medal for lantern transparencies and two medals for apparatus (if they find them worthy of awards.)

*Regulations.*—Each exhibitor of photographic pictures must fill up a printed entry form (supplied by the society). This must be enclosed, and addressed to the "Hon. Secretary," Photographic Society of Great Britain, 5A, Pall Mall East, London, S.W.

It is suggested that when any work shown is taken by a special process, prepared and made by the exhibitor, information as to particulars should be communicated.

At the back of each frame must be written the name and address of the exhibitor, with the title or description of the picture, and the number (if there be more than 1) to which it refers in the entry form.

Each frame or picture may have the exhibitor's name, and the subject of the picture, neatly inscribed, but no address or anything in the shape of an advertisement will be permitted.

Pictures in Oxford frames, and pictures previously exhibited in London, will not be admitted.

Each exhibitor of photographic apparatus must fill up the entry form (supplied by the society), and write a description of each piece of apparatus, and to the exhibit itself, a removable card must be attached, containing the name of the exhibitor, and the number to which it refers in the entry form.

The exhibition committee are instructed to refuse apparatus and appliances that have been already shown at London exhibitions and that do not embrace some points of special interest, to be mentioned by the exhibitor on the entry form.

Photographs colored by scientific or mechanical means will be admissible. Photographs colored by hand will not be admitted. Negatives and transparencies will be admitted.

N. B.—All exhibits of whatever description, must be entered on the society's entry form.

No charge for wall space will be made to foreign exhibitors.

*Reception of Exhibits.*—Exhibits sent in packing cases (carriage paid), must be addressed to the "Photographic Society of Great Britain," care of Mr. James Bourlet, 17 Nassau st., Middlesex Hospital, London.

Lantern transparencies sent in competition for the MEDAL, not less than six, fitted (removable) in a frame to stand upon the table, and it is desirable that duplicates thereof be sent for exhibition in the optical lantern. They must be delivered on Wednesday, September 21st, and will only be eligible for award when both the negatives (which may be required to be seen) and slides are the work of the exhibitor.

*Optical Lantern.*—Photographic transparencies will be shown with the society's optical lantern every Monday evening during the exhibition. Slides are invited to be sent for this purpose; they must not exceed  $3\frac{1}{4}$  inches in height and must be delivered at the Gallery not less than ten days before the Monday of exhibition, to enable the committee to select and arrange them.

Blank entry forms, and any further information respecting the exhibition, apparatus, lantern slides, and nomination form for membership, can be obtained from the Assistant-Secretary, Edwin Cocking, 5A, Pall Mall East, London, S.W.

W. F. DONKIN, M.A., F.C.S., F.I.C., Hon. Secretary, 142 Sinclair Road, Hammersmith, W.

THE Glasgow Photographic Convention which was held for one week, beginning with July 4th, is pronounced by the English journals a complete success. It may be equalled in the future, but it is impossible that it will be excelled.

The *British Journal of Photography* says: "A greater amount of real, solid business was done in that week than has ever been achieved during a similar period since photography was ushered into existence."

Our Convention is very nigh us. Let the same be said of the Chicago gathering of 1887.

IN our account of the beautiful picture of Hespenthal, which illustrated the last number of the AMERICAN JOURNAL OF PHOTOGRAPHY, we erred in saying the negative was upon an albumen plate. Dr. Wallace has kindly noticed the error, and informs us that it was upon wet collodion. We have received many congratulations for securing so artistic a subject, and for having it reproduced in so masterly a manner.

WE are glad to know that the fire in the rear store of the extensive manufactory of E. & H. T. Anthony & Co., although so destructive, will neither seriously interfere with their means of supplying their customers nor prevent a fine display at the Chicago Convention, although they may not be able to present such a good exhibit as they contemplated before the fire. This decision of Messrs. Anthony & Co. means much labor and untiring effort to be in time for the Convention, but the enterprise of the firm is quite equal to the occasion. Along with the host of others, we send our sympathy, and also applaud them for their resolution.

THE firm hitherto known as William H. Rau & Co., doing business in photography at 1206 Chestnut St., Philadelphia, has been dissolved by mutual consent of its members, and will in future be conducted at the same place solely by Mr. William H. Rau.

A number of improvements have been made in the factory, and greatly increased facilities for promptly supplying most excellent work in the various photographic branches.

A specialty is made of bromide enlargements and lantern slides. A catalogue of the latter is just issued, containing, without a doubt, the largest and most varied collection of views, from every part of the world, made from choice original negatives.

VICTORIO TURATI, of Milan, Italy, sends us a beautiful catalogue of fine reproductions from paintings, sculpture, bric-a-brac, and natural objects. They are upon process blocks, and redoun much to the credit of the establishment.

THE American Detective Cameras of E. & H. T. Anthony & Co., and of the Scovill Manufacturing Co., attracted much attention and commendation at the Glasgow Convention.

#### AUGUST BARGAIN LIST.

##### Accessories:

1—Papier Mache, Fire Place and Cabinet combined, fair condition, reduced to .....	\$4 00
1—Universal Position Chair, Crimson Terry ; all Attachments except Baby Chair ; good as new .....	30 00
—Spencer Head-rest .....	11 00
1—Drapery .....	4 00
1—Drapery .....	6 00
1—8x10 Osborne Interior, new, light left of sitter .....	16 00
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1—8x10 Eastman's Roll Holder, good as new .....	20 00
1—8x10 Hough's ground, light left of sitter .....	12 00
1—8x8 Seavey Ground, new, lt. right .....	15 00
1—8x8 Seavey Ground, new .....	15 00
1—7x10 Rubber bath, covered top .....	3 00
1—12x16 Rubber tray, used for silverying .....	2 50
1—Iron centre camera stand .....	3 00
1—8x10 Interior ground .....	6 50
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1—8x10 Interior ground .....	12 00
1—8x10 Plain painted ground .....	4 50
1—Bryant rustic gate .....	6 00
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1—Sliding arm chair .....	6 00
1—Queen Anne baby lounge .....	10 00
1—Rustic corner chair .....	6 00
1—8x10 Perfect camera stand .....	6 00
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1—8x10 Osborne's interior background, new, lt. left .....	\$20 50
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1—8x8 interior background .....	15 00
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1—4x8 Osborne's tide slip .....	7 50
1—Iron centre camera stand .....	2 50
5x8 orange glass developing trays .....	35
Wood drop shutters .....	1 50
Negative boxes, odd sizes, each .....	20
1—Adjustable arm Position Chair .....	12 00
1—Position Chair, rising back .....	8 50
1—6 inch Burnisher .....	5 00
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25—5x8 Flat Printing Frames, good condition, each .....	45
10—8x10 Flat Printing Frames, good condition, each .....	57

**Camera Boxes.**

1—5x8 Tourist Outfit, including 5x8 Tourist Camera Box, 2 Daisy Plate Holders, 1 Extension Tripod, and 1 Canvas Carrying Case, very little used. Price, new, \$40.50, will sell for .....	\$30 00
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1—11x14 New Haven Reversible Back Camera, Double Swing, new.....	44 00
1—14x17 New Haven Acme Portrait Camera, Single Swing, new.....	46 00
1—14x17 Double Swing Portrait Box	40 00
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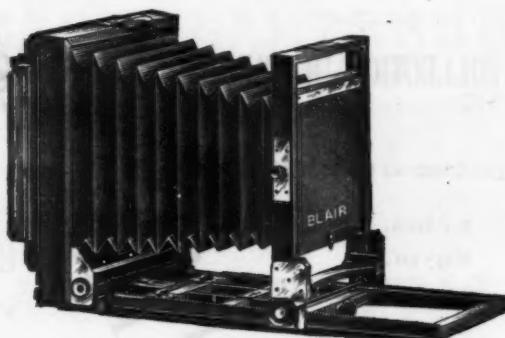
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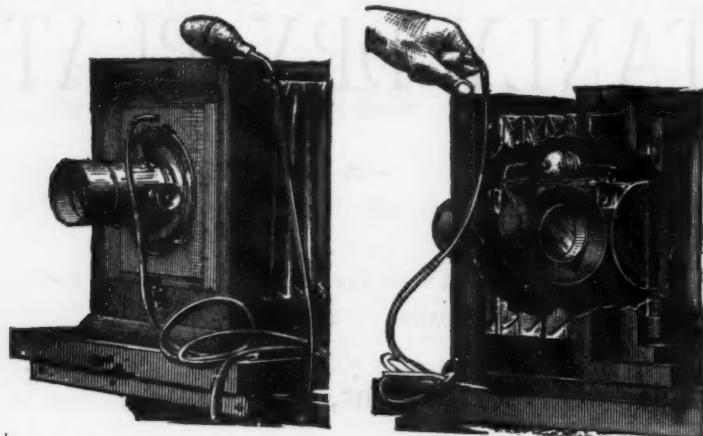
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